

## Patent Abstracts of Japan

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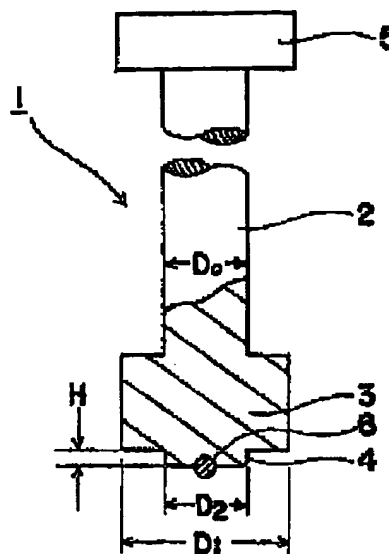
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TITLE : WELDING METHOD OF DOWEL AND  
ITS WELDED DOWEL



ABSTRACT : PURPOSE: To improve fatigue resistant strength by suppressing the discharge current in welding of a metallic dowel to be used as a binding member at the time of forming a composite structure composed of a steel part and a concrete part.

CONSTITUTION: The metallic welded dowel is formed successively with a stem 2 an expanding part 3 having a cross-sectional area larger than the cross-sectional area formed at the front end of this stem 2 and a reducing part 4 which is formed at this expanding part 3 and has a cross-sectional area smaller than the cross-sectional area of the expanding part in its axial line direction. The dowel is so stud welded that this reducing part 4 melts approximately completely. As a result, the initial welding current of a welding machine is suppressed at the time of stud welding while the sufficient destruction strength of the weld zone is substd. with the deformation quantity in the event of the destruction of the welded dowel against the intended shearing stress.

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